

# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

## AUTHORIZATION TO DISCHARGE UNDER THE

### MONTANA GROUND WATER POLLUTION CONTROL SYSTEM (MGWPCS)

In compliance with Montana Code Annotated (MCA) Section 75-5-101 *et seq.*, MCA, and the Administrative Rules of Montana (ARM) 17.30.1042, and ARM 17.30.1341, *et seq.*,

**Plum Creek Manufacturing Inc.**

is authorized to discharge from the **Plum Creek, Columbia Fall Operations at 500 12<sup>th</sup> Avenue West in Columbia Falls, Montana** to its sub-surface disposal system, to receiving waters: Class I ground water

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: **July 1, 2008.**

This permit and the authorization to discharge shall expire at midnight, **May 31, 2013**

FOR THE MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY

**DRAFT**

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Jenny Chambers  
Bureau Chief, Water Protection Bureau  
Permitting & Compliance Division

Issue Date: \_\_\_\_\_

A.	DEFINITIONS	3
B.	DESCRIPTION OF THE DISCHARGE POINT	5
C.	SPECIFIC EFFLUENT LIMITATIONS	6
D.	SELF-MONITORING REQUIREMENTS	7
E.	SPECIAL CONDITIONS	14
F.	COMPLIANCE SCHEDULE	26
<b>II.</b>	<b>MONITORING RECORDING AND REPORTING REQUIREMENTS</b>	<b>26</b>
A.	REPRESENTATIVE SAMPLING.	26
B.	MONITORING PROCEDURES.	26
C.	PENALTIES FOR TAMPERING.	27
D.	REPORTING OF MONITORING RESULTS.	27
E.	COMPLIANCE SCHEDULES.	27
F.	ADDITIONAL MONITORING BY THE PERMITTEE.	27
G.	RECORDS CONTENTS.	27
H.	RETENTION OF RECORDS.	28
I.	TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING.	28
J.	OTHER NONCOMPLIANCE REPORTING.	29
K.	INSPECTION AND ENTRY.	29
<b>III.</b>	<b>COMPLIANCE RESPONSIBILITIES</b>	<b>30</b>
A.	DUTY TO COMPLY.	30
B.	PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS.	30
C.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.	30
D.	DUTY TO MITIGATE.	30
E.	PROPER OPERATION AND MAINTENANCE.	30
F.	REMOVED SUBSTANCES.	31
G.	BYPASS OF TREATMENT FACILITIES:	31
H.	UPSET CONDITIONS	32
<b>IV.</b>	<b>GENERAL REQUIREMENTS</b>	<b>33</b>
A.	PLANNED CHANGES	33
B.	ANTICIPATED NONCOMPLIANCE	33
C.	PERMIT ACTIONS.	33
D.	DUTY TO REAPPLY.	33
E.	DUTY TO PROVIDE INFORMATION.	33
F.	OTHER INFORMATION.	33
G.	SIGNATORY REQUIREMENTS.	34
H.	PENALTIES FOR FALSIFICATION OF REPORTS.	34
I.	AVAILABILITY OF REPORTS.	35
J.	OIL AND HAZARDOUS SUBSTANCE LIABILITY.	35
K.	PROPERTY OR WATER RIGHTS.	35
L.	SEVERABILITY.	35
M.	TRANSFERS.	35
N.	FEES.	36
O.	REOPENER PROVISIONS:	36
P.	BIOSOLIDS:	37
<b>V.</b>	<b>SPECIAL CONDITIONS</b>	<b>37</b>
A.	CORRECTIVE ACTION.	37

## I. EFFLUENT LIMITATION AND MONITORING REQUIREMENT

### A. Definitions

1. **“30-day (and monthly) average,”** other than for fecal coliform bacteria is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.
2. **“90-day (and quarterly) average,”** other than for fecal coliform bacteria is the arithmetic average of all samples collected during a consecutive 90-day period or 3 calendar months, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar quarter shall be used for purposes of reporting self-monitoring data.
3. **“Annual Average Load”** is the arithmetic mean of all 180-day or semi-annual average loads reported during the calendar year for a monitored parameter.
4. **“BOD<sub>5</sub>”** is a measurement of the amount of oxygen utilized by the decomposition of organic material, over a five-day period of time in a wastewater sample; it is used as a measurement of the readily decomposable organic content of wastewater.
5. **“Bypass”** means the intentional diversion of waste streams from any portion of a treatment or storage facility.
6. **“Composite sample”** Sample composed of two or more discrete samples and shall be flow proportioned. The aggregate samples will reflect the average water quality covering the compositing or sample period. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sampled shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
  - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
  - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every “X” gallons of flow); and,
  - d. Continuous collections of sample, with sample collection rate proportional to flow rate.

7. **“Continuous”** is the measurement of effluent flow which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance process changes, or other similar activities.
8. **“Department”** means the Montana Department of Environmental Quality.
9. **“Grab”** sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream or monitoring well.
10. **“Instantaneous”** measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
11. **“Load limits”** are mass-based discharge limits expressed in units such as lb/day
12. **“Mixing zone”** is a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where water quality changes may occur. Also recognized as an area where certain water quality standards may be exceeded.
13. **“Nondegradation”** means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.
14. **“Process Wastewater”** means, for purposes of this permit, any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. The term does not include noncontact cooling water, material storage yard runoff (either raw material or processed wood storage), boiler blowdown, and fire control water.
15. **“Semi-Annual Average”** means the arithmetic average of all samples collected during a consecutive 180-day period or 6 calendar months, whichever is applicable.
16. **“Severe property damage”** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
17. **“TMDL”** means the total maximum daily load of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of waste load allocations for point sources, load allocations for

non-point and natural background sources, and a margin of safety.

18. **“TSS”** means total suspended solids, which is a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR part 136.

## **B. Description of the Discharge Point**

The authorization to discharge provided under this permit is limited to the outfalls that are specifically designated below as the discharge location. Discharges at any location not authorized under an MGWPCS permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

### **Outfall**

#### Serial Number

#### Description of Discharge Point

- 003A The discharge point for outfall 003A (Log Pond) is an unlined pond in the south west corner of the facility. The location of the discharge is located in Township 30 North, Range 20 West Section 8 at 48°22'30.4'' North latitude (45.37511) and 114°12'18.4'' West longitude (-114.20511). The Department has granted a standard ground water mixing zone for the individual parameter Total Dissolved Solids extending from the source 500 feet in a S10°W direction.
- 004A The discharge point for outfall 004A (Wastewater Overflow) is an unlined topographic depression located in the northwest corner of the facility. The discharge is located in Township 30 North, Range 20 West, Section 8 at 48°22'42.4'' North latitude (45.37844) and 114°12'32.6'' West longitude (-114.20906). The Department has granted a standard ground water mixing zone for the individual parameter Total Dissolved Solids extending from the source 500 feet in a S10°W direction.
- 005A The discharge point for outfall 005A (Plywood Ditch) is an unlined ditch in the northeast corner of the plywood facility. The location of the discharge is located in Township 10 North, Range 2 West, Section 7, 48°22'37.0'' North latitude (48.37694) and 114°11'40.1'' West longitude (-114.19447). The Department has granted a standard ground water mixing zone for the individual parameter Total Dissolved Solids extending from the source 500 feet in a S10°W direction.

006A The point for outfall 006A (Boiler Ditch) is an unlined ditch in the south central portion of the Plum Creek facility. The location of the discharge is in Township 30 North, Range 20 West Section 8 or 48°22'34.5'' North latitude (48.37625) and 114°11'57.7'' West longitude (-114.19936). The Department has granted a standard ground water mixing zone for the individual parameter Total Dissolved Solids extending from the source 500 feet in a S10°W direction.

### C. Final Effluent Limitations

Effective immediately and lasting through the term of the permit, the quality of effluent discharged to Outfall 003A as measured at the intake structure for the log deck watering pump shall at a minimum, meet the limitations as set forth in table 1.

**Table 1.** Final Numeric Effluent Limits for Outfall 003A

Parameter	Units	Concentration
pH	s.u	6.5-8.5
Chloride	mg/L	250
Sulfate	mg/L	250

Effective immediately and lasting through the term of the permit, the quality of effluent discharged to Outfall 004A as measured at the end of pipe discharging into the unlined topographic depression, shall at a minimum, meet the limitations as set forth in table 2.

**Table 2.** Final Numeric Effluent Limits for Outfall 004A

Parameter	Units	Limit
pH	s.u	6.5-8.5
Chloride	mg/L	250
Sulfate	mg/L	250

Effective immediately and lasting through the term of the permit, the quality of effluent discharged to Outfall 005A as measured in the plywood ditch shall, as a minimum, meet the limitations as set forth in table 3.

**Table 3.** Final Numeric Effluent Limits for Outfall 005A

<b>Parameter</b>	<b>Units</b>	<b>Limit</b>
<b>pH</b>	<b>s.u</b>	6.5-8.5
<b>Iron</b>	<b>mg/L</b>	0.3
<b>Aluminum</b>	<b>mg/L</b>	0.05-0.2
<b>Nitrate plus Nitrite</b>	<b>mg/L</b>	10
<b>Zinc</b>	<b>mg/L</b>	5
<b>Sulfate</b>	<b>mg/L</b>	250
<b>Arsenic</b>	<b>mg/L</b>	0.010
<b>Cadmium</b>	<b>mg/L</b>	0.005
<b>Total Phenol</b>	<b>mg/L</b>	0.3

Effective immediately and lasting through the term of the permit, the quality of effluent discharged to Outfall 006A as measured at the end of pipe discharging into the boiler ditch shall, as a minimum, meet the limitations as set forth in table 4.

**Table 4.** Final Numeric Effluent Limits for Outfall 006A

<b>Parameter</b>	<b>Units</b>	<b>Limit</b>
<b>pH</b>	<b>s.u</b>	6.5-8.5
<b>Sulfate</b>	<b>mg/L</b>	250
<b>Iron</b>	<b>mg/L</b>	0.3
<b>Aluminum</b>	<b>mg/L</b>	0.05-0.2
<b>Zinc</b>	<b>mg/L</b>	5
<b>Arsenic</b>	<b>mg/L</b>	0.010
<b>Cadmium</b>	<b>mg/L</b>	0.005
<b>Toluene</b>	<b>mg/L</b>	0.1
<b>Manganese</b>	<b>mg/L</b>	0.050

#### **D. Self-Monitoring Requirements**

As a minimum, upon the effective date of this permit, the constituents in Table 5, 6, 7 and 8 shall be monitored at the location, frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. Effluent quality monitoring will be conducted at a sampling point and at a time that allows for accurate characterization of effluent quality and volume.

The permittee shall monitor effluent flow following treatment and immediately prior to discharge

from outfalls 003A, 004A, 005A and 006A. Flow monitoring must be capable of measuring all contributions of flow to the outfalls. This includes but is not limited to process wastewater, storm water, blow down, any runoff from log deck operations and facility wash down water. Where effluent is discharged via pipe the effluent measurement method shall be either by recorder or a totalizing flow meter, dose counts or pump run-times will not be accepted. The permittee shall install the above mentioned flow monitoring equipment within one (1) year of the effective date of the permit. The permittee shall monitor the flow of the effluent continuously when flow monitoring equipment is installed. In the interim the permittee shall monitor flow instantaneously when effluent quality samples are collected.

#### Outfall 003A

Sampling of outfall 003A shall take place at or as close as possible to the intake for the log deck watering pump. The permittee shall monitor the effluent for the constituents in Table 5 at the frequencies and with the type of measurement indicated. If no discharge occurs during the entire monitoring period, it shall be stated in a Discharge Monitoring Report that no discharge occurred.

The permittee shall mix the water column in the log pond for a minimum of 12 hours prior to sampling to ensure thorough mixing of the effluent pond. The permittee shall use properly sized equipment that is proven to provide thorough mixing and to work all months of the year. The permittee shall keep a log book onsite documenting pond aeration and sampling events.

**Table 5: Outfall 003A Effluent Self-Monitoring Requirements**

Parameter, units	Units	Frequency	Sample Type <sup>(2)</sup>
<b>Effluent Flow Duration</b> <sup>(1)</sup>	days	Continuous <sup>(3)</sup>	Continuous
<b>Effluent Flow Volume, Total</b> <sup>(1)(5)</sup>	gallons	Continuous <sup>(3)</sup>	Continuous
<b>pH</b>	s.u	1/week <sup>(4)</sup>	Instantaneous
<b>Specific Conductance</b>	µmhos/cm	1/week	Instantaneous
<b>Total Dissolved Solids</b>	mg/L	1/Month	Grab
<b>Biological Oxygen Demand</b>	mg/L	1/Month	Grab
<b>Total Nitrogen</b>	mg/L	1/Month	Calculated
<b>Total Phosphorus as P</b>	mg/L	1/Month	Grab
<b>Chloride</b>	mg/L	1/Month	Grab
<b>Sulfate</b>	mg/L	1/Month	Grab

1) If no discharge occurs during the reporting period "No Discharge" shall be reported on the DMR.

2) See definitions, Part I.A of the permit.

3) Instantaneous flow monitoring will be required for the first year of the permit. One year after the effective date of the permit continuous flow monitoring will be required.

4) pH samples will be collected before, during and after sampling event and a maximum, minimum and average value will be reported.

5) The permittee must report daily, maximum daily and 30 day average total volume

**Outfall 004A**

Effluent monitoring requirements for Outfall 004A are contained in Table 6. Monitoring of the following effluent parameters is required at the end of pipe for outfall 004A. Sample type shall be composite in nature, to characterize the quality of effluent discharged over the length of the discharge. Composite sample will be flow paced, not time paced.

**Table 6: Outfall 004A Effluent Self-Monitoring Requirements**

<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>	<b>Sample Type<sup>(2)</sup></b>
<b>Effluent Flow Duration<sup>(1)</sup></b>	hours	Continuous <sup>(3)</sup>	Continuous
<b>Effluent Flow Volume, Total<sup>(1)(5)</sup></b>	gallons	Continuous <sup>(3)</sup>	Continuous
<b>pH</b>	s.u	3/Event <sup>(4)</sup>	Instantaneous
<b>Specific Conductance</b>	µmhos/cm	3/Event	Instantaneous
<b>Total Dissolved Solids</b>	mg/L	1/Event	Composite
<b>Biological Oxygen Demand</b>	mg/L	1/Event	Composite
<b>Total Nitrogen as N</b>	mg/L	1/Event	Calculated
<b>Total Phosphorus as P</b>	mg/L	1/Event	Composite
<b>Chloride</b>	mg/L	1/Event	Composite
<b>Sulfate</b>	mg/L	1/Event	Composite

1) If no discharge occurs during the reporting period "No Discharge" shall be reported on the DMR.

2) See definitions, Part I.A of the permit

3) Instantaneous flow monitoring will be required to monitor flow during each event.

4) pH samples will be collected before, during and after sampling event and a maximum, minimum and average value will be reported

5) The permittee must report daily, maximum daily and 30 day average total volume

**Outfall 005A**

Effluent monitoring requirements for Outfall 005A are contained in Table 7. Monitoring of the following effluent parameters is required in the plywood ditch for outfall 005A. Samples collected from outfall 005A will be composite in nature. Samples will be collected from multiple locations in the plywood ditch and composited prior to filling sample bottles.

**Table 7: Outfall 005A Effluent Self-Monitoring Requirements**

Parameter, units	Units	Frequency	Sample Type <sup>(2)</sup>
<b>Effluent Flow Duration</b> <sup>(1)</sup>	day	Continuous <sup>(3)</sup>	Continuous
<b>Effluent Flow Volume, Total</b> <sup>(1)(5)</sup>	gallons	Continuous <sup>(3)</sup>	Continuous
<b>pH</b>	s.u	1/week <sup>(4)</sup>	Instantaneous
<b>Specific Conductance</b>	µmhos/cm	1/week	Instantaneous
<b>Total Dissolved Solids</b>	mg/L	1/Month	Composite
<b>Biological Oxygen Demand</b>	mg/L	1/Month	Composite
<b>Total Nitrogen</b>	mg/L	1/Month	Calculated
<b>Total Phosphorus as P</b>	mg/L	1/Month	Composite
<b>Nitrate plus Nitrite</b>	mg/L	1/Month	Composite
<b>Sulfate</b>	mg/L	1/Month	Composite
<b>Iron, Dissolved</b>	mg/L	1/Month	Composite
<b>Aluminum, Dissolved</b>	mg/L	1/Month	Composite
<b>Zinc, Dissolved</b>	mg/L	1/Month	Composite
<b>Arsenic, Dissolved</b>	mg/L	1/Month	Composite
<b>Cadmium, Dissolved</b>	mg/L	1/Month	Composite
<b>Barium, Dissolved</b>	mg/L	1/Month	Composite
<b>Total Phenol</b>	mg/L	1/Month	Grab

- 1) If no discharge occurs during the reporting period “No Discharge” shall be reported on the DMR.
- 2) See definitions, Part I.A of the permit
- 3) Instantaneous flow monitoring will be required for the first year of the permit. One year after the effective date of the permit continuous flow monitoring will be required.
- 4) pH samples will be collected before, during and after sampling event. A maximum, minimum and average value will be reported
- 5) The permittee must report daily, maximum daily and 30 day average total volume

### Outfall 006A

Effluent monitoring requirements for Outfall 006A are contained in Table 8. Monitoring of the following effluent parameters is required at the end of pipe of outfall 006A. Samples shall be grab samples collected from the end of pipe originating from the floor drain in the boiler area. As this area is washed down daily, samples shall be collected when this area is actively discharging to ensure effluent samples are collected and are representative of the discharge.

**Table 8: Outfall 006A Effluent Self-Monitoring Requirements**

Parameter	Units	Frequency	Sample Type <sup>(2)</sup>
<b>Effluent Flow Duration</b> <sup>(1)</sup>	day	Continuous <sup>(3)</sup>	Continuous
<b>Effluent Flow Volume, Total</b> <sup>(1)(5)</sup>	gallons	Continuous <sup>(3)</sup>	Continuous
<b>pH</b>	s.u.	1/week <sup>(4)</sup>	Instantaneous
<b>Specific Conductance</b>	µmhos/cm	1/week	Instantaneous
<b>Total Dissolved Solids</b>	mg/L	1/Month	Grab
<b>Biological Oxygen Demand</b>	mg/L	1/Month	Grab
<b>Total Nitrogen as N</b>	mg/L	1/Month	Calculated
<b>Total Phosphorus as P</b>	mg/L	1/Month	Grab
<b>Chloride</b>	mg/L	1/Month	Grab
<b>Sulfate</b>	mg/L	1/Month	Grab
<b>Iron, Dissolved</b>	mg/L	1/Month	Grab
<b>Aluminum, Dissolved</b>	mg/L	1/Month	Grab
<b>Zinc, Dissolved</b>	mg/L	1/Month	Grab
<b>Barium, Dissolved</b>	mg/L	1/Month	Grab
<b>Arsenic, Dissolved</b>	mg/L	1/Month	Grab
<b>Cadmium, Dissolved</b>	mg/L	1/Month	Grab
<b>Manganese, Dissolved</b>	mg/L	1/Month	Grab
<b>Oil and Grease</b>	mg/L	1/Month	Grab
<b>Toluene</b>	mg/L	1/Month	Grab

- 1) If no discharge occurs during the reporting period "No Discharge" shall be reported on the DMR.
- 2) See definitions, Part I.A of the permit
- 3) Instantaneous flow monitoring will be required for the first year of the permit. One year after the effective date of the permit continuous flow monitoring will be required.
- 4) pH samples will be collected before, during and after sampling event. A maximum, minimum and average value will be reported
- 5) The permittee must report daily, maximum daily and 30 day average total volume

3. Supplemental monitoring for Outfalls 003A, 004A, 005A and 006A. The permittee shall monitor Outfalls 003A, 004A, 005A and 006A for those parameters and at the frequencies listed in Table 9.

**Table 9. Outfall 003A, 004A, 005A and 006A**

Parameter	Units	Frequency	Sample Type
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<b>Aluminum, Dissolved</b>	mg/L	Quarterly	Grab
<b>Barium, Dissolved</b>	mg/L	Quarterly	Grab
<b>Iron, Dissolved</b>	mg/L	Quarterly	Grab
<b>Manganese, Dissolved</b>	mg/L	Quarterly	Grab
<b>Zinc, Dissolved</b>	mg/L	Quarterly	Grab
<b>Arsenic, Dissolved</b>	mg/L	Quarterly	Grab
<b>Total Ammonia, as N</b>	mg/L	Quarterly	Grab
<b>Total Phenols</b>	mg/L	Quarterly	Grab
<b>VOC</b>	mg/L	Quarterly	Grab
<b>Major Ions</b>	mg/L	Quarterly	Grab
<b>Total Petroleum Hydrocarbons-IR</b>	mg/L	Quarterly	Grab
<b>Tannin and Lignin</b>	mg/L	Quarterly	Grab
<b>Oil and Grease</b>	mg/L	Quarterly	Grab
<b>Formaldehyde</b>	mg/L	Quarterly	Grab

1) Major Ions are  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{F}^-$ ,  $\text{Cl}^-$ ,  $\text{SO}_4^{2-}$ ,  $\text{HCO}_3^-$ ,  $\text{PO}_4^{3-}$

4. Monitoring of newly installed wells shall commence immediately after construction and development of the well. Construction of monitoring wells shall not take place until Department review and approval of the ground water monitoring well location and monitoring well installation plan is approved (See Section E, 2 of this document). Monitoring shall continue on a monthly or quarterly basis, for the duration of the permit cycle. Newly installed wells shall be monitored for those parameters and at the frequency listed in table 10. The results of this analysis will be submitted to the Department monthly in the form of facility DMRs utilized with the next permit renewal to determine the extent of potentially impacted groundwater.

**Table 10. Ground Water Self monitoring Requirements**

<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>	<b>Sample Type</b>
<b>Static Water Level</b>	Ft.	Monthly	Instantaneous
<b>pH</b>	s.u	Monthly	Instantaneous

<b>Specific Conductance</b>	$\mu\text{mhos/cm}$	Monthly	Instantaneous
<b>Nitrate + Nitrite</b>	mg/L	Quarterly	Grab
<b>Total Nitrogen as N</b>	mg/L	Quarterly	Calculated
<b>Total Phosphorus as P</b>	mg/L	Quarterly	Grab
<b>Total Ammonia as N</b>	mg/L	Quarterly	Grab
<b>TKN</b>	mg/L	Quarterly	Grab
<b>Sulfate</b>	mg/L	Quarterly	Grab
<b>BOD</b>	mg/L	Quarterly	Grab
<b>COD</b>	mg/L	Quarterly	Grab
<b>Aluminum, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Barium, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Iron, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Manganese, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Zinc, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Arsenic, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>Copper, Total Dissolved</b>	mg/L	Quarterly	Grab
<b>TPH-IR</b>	mg/L	Quarterly	Grab
<b>Tannin and Lignin</b>	mg/L	Quarterly	Grab
<b>Total Phenols</b>	mg/L	Quarterly	Grab
<b>Major Ions<sup>(1)</sup></b>	mg/L	Quarterly	Grab
<b>Formaldehyde</b>	mg/L	Quarterly	Grab

1) Major Ions are  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{F}^-$ ,  $\text{Cl}^-$ ,  $\text{SO}_4^{2-}$ ,  $\text{HCO}_3^-$ ,  $\text{PO}_4^{3-}$

5. In conjunction with routine sampling of newly installed monitoring wells, the permittee will be required to continue sampling the existing monitoring wells on site. This includes but is not limited to, monthly sampling of MW-1, MW-2, MW3a and MW-5. These wells will be sampled for those parameters and at the frequency listed in Table 11. Ground water monitoring of existing wells shall commence on the effective date of the permit and continue on a quarterly basis for the duration of the permit cycle.

**Table 11. Ground Water**

<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>	<b>Sample Type</b>
<b>Static Water Level</b>	Ft.	Quarterly	Instantaneous
<b>pH</b>	s.u	Quarterly	Instantaneous
<b>Specific Conductance</b>	$\mu\text{mhos/cm}$	Quarterly	Instantaneous

<b>TDS</b>	mg/L	Quarterly	Grab
<b>Chloride</b>	mg/L	Quarterly	Grab
<b>TKN</b>	mg/L	Quarterly	Grab
<b>Total Ammonia as N</b>	mg/L	Quarterly	Grab
<b>Nitrate plus Nitrite as N</b>	mg/L	Quarterly	Grab

5. If monitoring on the downgradient edge of the mixing zone demonstrates that permit limits or ground water quality standards in the receiving ground water are exceeded as a result of the permitted discharge the permittee shall initiate monthly sampling and analysis of all down gradient monitoring wells.
6. If any monitoring well(s) are abandoned, destroyed or decommissioned during any activities at the facility or are no longer able to be sampled due to fluctuations in the ground water table, the permittee shall install a new well to replace the abandoned, destroyed, decommissioned or the non-viable well(s). Monitoring of newly installed wells (See Section E, 2 of this document) shall commence immediately following construction and development of the well.
7. All ground water quality and effluent water quality sampling will be conducted in accordance with EPA approved methods 40 CFR part136. If No EPA methodology exists, the Permittee shall use a method previously approved by the Department.

## **E. Special Conditions**

### **1). No Discharge of Process Wastewater:**

There shall be no discharge of process wastewater from outfalls 003A, 004A, 005A and 006A within 2 years of the effective date of the permit. For the purpose of this permit, any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. The term does not include noncontact cooling water, material storage yard runoff (either raw material or processed wood storage), boiler blowdown, and fire control water.

### **2). Ground Water Study**

Within 180 days of the effective date of the permit, the permittee shall submit to the Department, for review and comment a ground water quality and quantity assessments as well as a ground water quality monitoring plan. The plan shall include but is not limited to an assessment of the hydrogeologic conditions in the immediate area, ground water monitoring well installation,

monitoring, sampling and analysis. The plan shall include but not be limited to the following:

1. Physical and chemical characterization of the aquifer beneath the permitted site.

- a. The permittee shall provide a physical hydrogeologic characterization of the aquifer beneath the permitted site. The permittee shall provide the lithology, hydraulic conductivity (K), Transmissivity (T), Storativity (S), gradient (i) and the thickness and extent of the shallowest aquifer.
- b. The permittee shall determine the depth to ground water, groundwater flow direction and gradient, identify groundwater divides, hydraulic connectivity with surface water and document seasonal fluctuations in ground water flow regime.
- c. The permittee shall be responsible for delineation of the spatial and temporal variability in ground water quantity and quality including determination of the fate and transport of pollutants in the groundwater beneath the entire Columbia Falls lumber processing facility.

2. Ground Water Monitoring Well Installation

- a. The permittee will provide information pertaining to the location, design and development of monitoring wells up gradient and down gradient of the Columbia Falls Lumber Mill. All monitoring wells shall be located on land owned, or controlled by the permittee. The permittee shall demonstrate access to the proposed monitoring well locations for the life of the facility.
- b. The permittee will provide conceptual drawings of the proposed wells, and a description of the well development process.
- c. The permittee will ensure up gradient wells are installed in the same hydrogeologic unit, outside of influence of impacted groundwater from the Columbia Falls Lumber Mill site.
- d. If up gradient wells cannot be completed in the same hydrogeologic unit the permittee shall identify suitable alternative up gradient wells or reference wells.
- e. The permittee shall be responsible for sampling monitoring wells on a monthly basis and reporting those results to the Department on a quarterly basis. Reports shall include water quality analytical results, potentiometric maps and ground water flow directions for each sampling event and ground water depths.
- f. The permittee will submit to the Department well logs for all wells used in the above mentioned analysis.

3. Ground Water Monitoring Well Locations

- a. One well will be installed on the down gradient edge of the standard mixing zone issued to the log pond (outfall 003A). This well will serve as a monitoring

- point, to ensure that no detriment occurs to beneficial uses. This well will be called compliance point (003A-MW)
- b. A second monitoring well will be installed on the down gradient edge of the standard mixing zone for the wastewater overflow area (outfall 004A). This well will serve as a monitoring point, to ensure that no detriment occurs to beneficial uses. This well will be called compliance point (004A-MW)
  - c. A third monitoring well will be installed down gradient of the plywood pond. This well will serve as a monitoring point, to ensure that no detriment occurs to beneficial uses. This well will be called compliance point (005A-MW)
  - d. A fourth monitoring well will be installed down gradient of the boiler ditch. This well will serve as a monitoring point, to ensure that no detriment occurs to beneficial uses. This well will be called compliance point (006A-MW).
  - e. A fifth monitoring well will be installed up gradient of the entire facility. This well will be centrally located up gradient of the northeast corner of the class III landfill and north of 3<sup>rd</sup> St. West, North of the permitted facility. MW-2 will no longer be considered up gradient.

#### 4. Monitoring Well Sampling.

- a. The permittee shall sample all monitoring wells at the frequency and for the parameters listed in tables 10 or 11. Sampling shall include but not be limited to those parameters listed in tables 10 or 11.
- b. The permittee shall analyze all ground water quality samples in accordance with EPA accepted 40 CFR 136 methods. If no EPA approved methodology exists for a parameter the permittee shall analyze those samples via a Department approved method.
- c. The permittee shall sample the wells in accordance with the Departments Historical Non-point Source Water Quality Standard Operating Procedures subpart 11.10 Groundwater Data Collection.

All wells will be finished in the shallowest water bearing aquifer. If groundwater monitoring wells are not finished in the shallowest water bearing aquifer the permittee will be required to install a new monitoring well that is finished in the shallowest water bearing aquifer. Aquifer tests shall be performed on all the newly constructed wells to acquire values for Hydraulic Conductivity, Transmissivity and Storativity of the aquifer. Ground water flow gradient shall be ascertained and a ground water flow direction established. The Department must approve all well locations prior to installation. Proposed well locations will be submitted to the Department for review and comment within 180 days from the effective date of the permit, and at least 30 days prior to installation. Well locations shall be approved by the department prior to installation. All wells are to be located and constructed in a manner that allows sampling to be conducted year round. Well logs for the newly constructed wells will be submitted to the Department upon completion. If the Department comments on the Plan and requires substantive modifications, a revised plan shall be submitted to the Department within 60 days of permittee receipt of Department comments.

Within 180 days of the effective date of the permit, the permittee shall submit to the Department for comment, a plan for ground water monitoring well installation to include a brief summary of the monitoring, sampling and analysis plan for monitoring wells 003A-MW, 004-MW, 005A-MW, 006A-MW and the up gradient well. The plan is to include the location, conceptual design and construction methods for the planned ground water monitoring wells, and the monitoring, sampling and analysis methods that will be used to meet the monitoring required in the Permit.

Within 60 days of monitoring well installation, the permittee shall submit to the Department a brief report or letter documenting the results of the monitoring well installation including the final location of the installed monitoring wells, construction details for each well and a report on ground water quality in the from the well. Ground water quality analysis shall include those parameters listed in Tables 10 and 11. Ground water quality monitoring shall begin immediately after well development and appropriate recovery and rest period, and continue though the duration of the permit.

#### 4). Effluent Flow Monitoring

The permittee shall monitor effluent flow following treatment and immediately prior to discharge from outfalls 003A, 004A, 005A and 006A. The permittee shall install effluent flow monitoring equipment with the capability of quantifying all flow contributions to an outfall. This includes but is not limited to process wastewater, storm water, blow down, any runoff from log deck operations and facility wash down water. Prior to installation of effluent flow monitoring equipment the permittee shall submit proposed methodologies to the Department for review and approval. Flow measuring equipment shall be installed within one (1) year of the effective date of the permit. The permittee shall monitor the flow of the effluent continuously. In the interim flow monitoring will be conducted on an instantaneous basis when effluent water quality samples are collected.

#### 5). Storm Water Pollution Prevention Plan

The permittee will be expected to adhere to requirements for storm water discharges associated with industrial activities. Those activities of concern, which are to be included in a Storm Water Pollution Prevention Plan (SWPPP) include but are not limited to storm water runoff and commingled storm water runoff associated with: The plywood production facility and the area surrounding it; the sawmill and planer facilities and the area surrounding them, log storage area north of the plywood production facility; the boiler facility and the area surrounding it, the MDF plant and the area surrounding it, the log pond and the log yard and the areas surrounding them. The permittee shall develop and implement a SWPPP. The purpose of the SWPPP is to identify sources of pollution to storm water and to select Best Management Practices (BMPs) to eliminate or minimize pollutant discharges at the source and/or to remove pollutants contained in storm water runoff. The permittee must implement the provisions of the SWPPP that will include the following:

1) General SWPPP Requirements

- a) The SWPPP and associated documentation, as well as BMPs developed and implemented, must be accomplished using good standard engineering practices.
- b) The SWPPP must be retained onsite at the facility that generates the storm water discharge. Provided no permanent offices/buildings are located at the facility site, a copy of these documents shall be retained at the office of the contact person identified in the permit application and at the office of the primary individual responsible for the implementation of the SWPPP, and shall be brought to the site at all times with these identified personnel. Should the identity of these responsible contacts/individuals change during the permit period, the permittee shall ensure measures are in place to transfer, and familiarize replacement personnel with the requirements pertaining to the SWPPP.
- c) The SWPPP must be signed in accordance with the signatory requirements stated in Part IV.G of this permit.
- d) The SWPPP must be made available upon request of Department staff, such as during inspections.
- e) The Department may notify the permittee that the SWPPP does not meet one or more of the minimum requirements of this permit. After such notification from the Department, the permittee shall make changes to the SWPPP and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise stated by the Department, the permittee shall have 30 days after such notification to make the required changes. When the Department makes such notification, the permittee shall provide the Department with a copy of revisions to the SWPPP.
- f) The permittee shall amend the SWPPP whenever there is a change in design, construction, operation, or maintenance that has significant effect on the potential for the discharge of pollutants to surface waters, or if the SWPPP proves to be ineffective in achieving the general objective of controlling pollutants in a storm water discharge covered under this permit. When such revisions are made to the SWPPP based upon this permit condition, the permittee shall provide the Department with a copy of revisions to the SWPPP.

- g) The SWPPP must identify the name of receiving surface waters. If there is a distinguishable point source discharge or outfall, the SWPPP must include a description of the size, type, and location of each point source discharge or outfall. A description of storm water runoff flow and drainage patterns into the receiving surface waters must be provided. If the discharge is to a municipal separate storm sewer, the location of any storm sewer discharge into the receiving surface waters must be provided.
- h) The SWPPP must identify a specific person or persons at the facility who are responsible for SWPPP development, implementation, maintenance, and revision. The SWPPP must clearly identify the responsibilities of each person. The activities and responsibilities of the person(s) must address all aspects of the SWPPP.
- i) The SWPPP must identify facility personnel training programs used to inform personnel responsible for implementing activities identified in the SWPPP or otherwise responsible for storm water management of the components and goals of the SWPPP. Training should address topics such as spill response, good housekeeping, and material management practices. A schedule must identify the frequency for such training.
- j) The SWPPP must address preventative maintenance measures which include the inspection and maintenance of storm water management BMPs. Qualified personnel shall be identified in the SWPPP to inspect the facility site and storm water management BMPs following each significant storm water rainfall event resulting in 0.5 inches of precipitation or more, or after significant snowmelt events. Inspections must be documented and maintained with the SWPPP. Inspections and their respective records must include tracking or follow-up procedures to ensure adequate response and corrective actions have been taken based on any problems or deficiencies observed during the inspection.
- k) The SWPPP must address good housekeeping measures to help maintain a clean, orderly, facility. Measures could include a routine schedule for the managing/removal of waste materials, as well as routine inspections of potential problem areas.
- l) The SWPPP must include a General Location Map (such as a USGS topographic quadrangle map), extending one mile beyond the property boundaries of the facility, with enough detail to identify the location of the facility, any storm water discharges, and the receiving surface waters.

waters. The facility site must be clearly delineated on this map. The permittee may use the topographic map submitted with the application provided it indicates this information with respect to storm water discharges.

## 2) Identification of Potential Pollutant Sources

The SWPPP must provide a description of potential pollutant sources which may reasonably be expected to affect the quality of storm water discharges. The SWPPP must identify all significant activities and materials that could potentially be significant pollutant sources. To accomplish this, the SWPPP must include, at a minimum:

- a) For each area of the facility with storm water discharges from regulated activities that have a reasonable potential to contain significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants and parameters of concern that are likely to affect the storm water discharge. Factors to consider include the toxicity of chemicals; quantity of chemical used, produced or discharged; the likelihood of contact with storm water; the histories of any MGWPCS permit violations; and the characteristics and uses of the receiving waters. In the identification of potential pollutants, and depending on the type of facility, items to identify and assess may include:
  - (1) Areas and management practices used for the storage, treatment, or disposal of wastes;
  - (2) Areas where significant spills and leaks of hazardous substances may have occurred;
  - (3) Areas and management practices used for the loading or unloading of dry bulk materials and liquids;
  - (4) Areas and management practices used for the outdoor storage of materials and/or products;
  - (5) Areas and management practices used for outdoor manufacturing or processing activities;
  - (6) Areas and management practices used for vehicle fueling, washing, and maintenance;
  - (7) Dust or particulate-generating processes;
  - (8) Illicit connections and/or management practices;
  - (9) Areas more susceptible to erosion; and,
  - (10) Areas with unstable sediment due to ground disturbance activities.

The permittee must evaluate these potential pollutant sources back at least three years prior to the date permit coverage is applied for the respective storm water discharge.

- b) A summary of existing storm water quality sampling test results which characterize historical pollutants in storm water discharges.
  - c) Estimate and define area(s) of relatively impervious surfaces (including paved areas and facility structural roofs) with respect to the total area drained by each point source discharge of storm water.
  - d) An evaluation of how the quality of any potential storm water running onto the facility site would impact the facility's storm water discharge.
- 3) Storm Water Management Best Management Practices
- a) SWPPPs must include a description of storm water management Best Management Practices (BMPs) appropriate for the facility, including those used to divert, infiltrate, reuse, or otherwise manage storm water runoff that reduces pollutants in storm water discharges from the site. The appropriateness and priorities of BMPs in a SWPPP shall reflect the identified potential sources of pollutants to storm water at the facility in Part I.E.4.2 of this permit.
  - b) Reasonable and appropriate BMPs may include: reuse of collected storm water (such as for process water or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices, detention/retention devices (including constructed wetlands); run-on/runoff controls; diversion structures; flow attenuation by use of open vegetated swales, natural depressions, and other practices; and, ponds. Where practicable, industrial materials and activities could be protected by a storm resistant shelter to prevent exposure to rain or snow.
  - c) The location and description of any treatment to remove pollutants that storm water receives.
  - d) The SWPPP must provide a description of measures to ensure the ongoing implementation and maintenance of BMPs. Inspections and maintenance activities, such as cleaning oil and grit separators or catch basins, must be documented and recorded. Incidents such as spills, leaks, other releases of potential pollutants, and/or other material/waste management problems,

management problems, must also be documented and recorded.

- e) The SWPPP must address Spill Prevention and Response Measures as follows:
  - (1) Areas where potential spills may occur that could contribute pollutants to storm water discharges, and their accompanying drainage points, must be identified clearly in the SWPPP.
  - (2) Where appropriate, specific material-handling procedures, storage requirements, and use of equipment, such as diversion valves, should be considered in the SWPPP.
  - (3) Procedures and necessary equipment for cleaning up spills must be identified in the SWPPP and made available to the appropriate personnel.
  - (4) Emergency spill/response contact and/or notification numbers must be listed in the SWPPP.
  - (5) SWPPP records of spills must be updated when a significant spill or leak of hazardous substances occurs and must include a description of the specific origin and location of the release, a description of the materials released, an estimate of the quantity of the release, and a description of any remediation or cleanup measures which were taken.
  
- f) The SWPPP must address Sediment and Erosion Control BMPs as follows:
  - (1) The SWPPP must describe sediment and erosion control BMPs including various structural, vegetative, and/or stabilization measures.
  - (2) The SWPPP must allow for BMPs to be implemented as necessary.
  - (3) The SWPPP must address areas which have a higher potential for erosion due to topography, slope characteristics, facility activities, and/or other factors.
  - (4) An assessment of the nature of any fill material to be used, the existing soils located at the site, and the erodibility (high, moderate, or slight) of such soils must be provided in the SWPPP.
  - (5) Storm water discharges associated with construction activity at the facility site may be included under this permit provided the SWPPP is developed or revised to address these discharges as follows:

- The SWPPP must identify and locate the BMPs to be used during and after the construction project to control sediment discharges to surface waters;
- Final stabilization of disturbed areas must be ensured;
- This Sediment and Erosion Control section of the SWPPP must be updated with a SWPPP modification to reflect new construction activity as necessary; and,
- The SWPPP modification must be submitted to the Department prior to the start of construction.

Provided these items are addressed, coverage for storm water discharges associated with construction activity under this permit would commence on the date stated in the SWPPP or when construction starts.

- (6) The SWPPP may include the use of BMPs such as sediment basins, detention/retention structures, berms, barriers, filter strips, covers, diversion structures, sediment control fences, straw bale dikes, seeding, sodding, and/or other control structures. Any SWPPP elements that require engineered structures, such as detention ponds or diversion structures, must be prepared by a qualified individual using good standard engineering practices.

4) SWPPP Site Map or Plan

The SWPPP must include a site map or plan which indicates the following:

- a) An identification of each point source discharge of storm water with a delineated outline of the respective drainage area;
- b) Identify each regulated point source sample location with the DMR formal numeric identifier on the SWPPP site map;
- c) Delineated drainage patterns which clearly indicate the storm water runoff flow patterns (such as using arrows or detailed topographic contours to show which direction storm water will flow);
- d) The "areas" identified in Part I.E.4.2).a). and c, above;
- e) The "BMPs" identified in Part I.E.4., above.;

- f) Major permanent facility structures;
  - g) Each well where liquids associated with the facility are injected underground including any storm water conveyances;
  - h) Location and source of runoff from adjacent property containing significant quantities of pollutants of concern to the facility as discussed in Part A.2.d, above;
  - i) Location of all surface waters on or near to the construction activity site (including perennial and intermittent waterbodies, ephemeral streams, springs, wetlands with standing water, etc.);
  - j) A map scale;
  - k) A north arrow; and,
  - l) For construction activities disturbing five acres or more, the permittee must obtain permit coverage under the appropriate storm water permit for activities related to construction.
- 5) Comprehensive Site Inspection and Compliance Evaluation Report
- a) For storm water discharges that are associated with this industrial facility, a Comprehensive Site Inspection must be performed annually to identify areas contributing to the regulated storm water discharge and to evaluate whether BMPs to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of this permit.
  - b) A Comprehensive Site Inspection must assess the following:
    - (1) Whether the description of potential pollutant sources is accurate as required under Part I.E.4.2. of this permit;
    - (2) Whether the site map has been updated or otherwise modified to reflect current conditions;
    - (3) Whether the BMPs to control potential pollutants in storm water discharges as identified in the SWPPP and Part I.E.4.3. of this permit are being effectively implemented; and,

- (4) Whether any SWPPP revisions such as additional BMPs are necessary.
- c) Based on the results of the Comprehensive Site Inspection, the description of potential pollutant sources and BMPs identified in the SWPPP must be revised as appropriate within 14 days of such inspection and must provide for implementation of the changes to the SWPPP in a timely manner.
- d) A Compliance Evaluation Report must be submitted to the Department addressing the Comprehensive Site Inspection performed during each calendar year.
  - (1) The report must identify personnel making the inspection and the date(s) of the inspection.
  - (2) The report must summarize observations made based on the items stated in Part I.E.4.5.b.
  - (3) The report must summarize actions taken in accordance with Part I.E.4.5.c.
  - (4) The report must be retained with the SWPPP.
  - (5) The permittee shall submit a copy of the report to the Department by January 28th of each year for the preceding calendar year's inspection.
  - (6) The report must identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report must contain a certification that the facility is in compliance with the SWPPP and this permit.
  - (7) The report must be signed in accordance with the signatory requirements stated in Part IV.G. of this permit.
- e) A tracking or follow-up procedure, including a schedule for implementation, must be used and identified in the Report which ensures adequate response and corrective actions have been taken in response to the Comprehensive Site Inspection and/or non-compliances.
- f) Records of the Comprehensive Site Inspection, the Compliance Evaluation Report, and any related follow-up actions must be maintained by the permittee.

## **F. Compliance Schedule**

The following table provides the timeframe and activities that PCM shall adhere to.

**Table 21. Compliance Requirements**

Compliance Time Frame	Activity
2 years from the effective date of the permit	<ul style="list-style-type: none"> <li>PCM shall cease all discharge of process wastewater from outfalls 003A, 004A, 005A and 006A</li> <li>PCM shall cease discharging ash bunker runoff</li> </ul>
1 year from the effective date of the permit	<ul style="list-style-type: none"> <li>The permittee shall install monitoring equipment and monitor the flow of effluent to outfalls 003A, 004A, 005A and 006A continuously.</li> </ul>
Within 180 days of the effective date of the permit	<ul style="list-style-type: none"> <li>Submit to the Department, for review and comment a ground water quality and quantity assessments as well as a ground water quality monitoring plan.</li> <li>Submit to the Department for review and comment proposed well locations (PCM shall provide the Department at least 30 days notice prior to installation of Monitoring wells).</li> <li>Implement the provisions of the SWPPP required under I.E.4 of this permit</li> </ul>
With 60 days of Department approval of monitoring well locations	<ul style="list-style-type: none"> <li>PCM shall install monitoring wells</li> </ul>
With in 60 days of monitoring well installation	<ul style="list-style-type: none"> <li>PCM shall submit a report or letter documenting the results of the monitoring well installation</li> </ul>
Effective date of the permit	<ul style="list-style-type: none"> <li>PCM will be required to adhere to be in compliance with the permit limits outlined in Tables 1-4 of this document</li> <li>PCM shall initiate the self monitoring requirement outlined in table 5-10 of this document</li> </ul>

## **II. MONITORING RECORDING AND REPORTING REQUIREMENTS**

### **A. Representative Sampling.**

Effluent samples taken in compliance with the monitoring requirements established under Part I shall be collected from the last point of control prior to discharge into the drainfield. Samples shall be representative of the volume and nature of the monitored medium.

### **B. Monitoring Procedures.**

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording devices used in obtaining data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured.

### **C. Penalties for Tampering.**

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than six months, or by both.

### **D. Reporting of Monitoring Results.**

Self-monitoring reports shall be submitted to the Department quarterly. Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. Following the issuance of this permit, if no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (Part IV, Section G) and submitted to the Department at the following address:

Montana Department of Environmental Quality  
Water Protection Bureau  
1520 East 6th Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901  
Phone: (406) 444-3080

All reports, notifications and inquiries regarding compliance with this permit shall be submitted to the Department at the above address.

**E. Compliance Schedules.**

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

**F. Additional Monitoring by the Permittee.**

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

**G. Records Contents.**

Records of monitoring information shall include:

1. The dates, exact place, and time of sampling or measurements;
2. The initials or name(s) of the individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The time analyses were initiated;
5. The initials or name(s) of individual(s) who performed the analyses;
6. References and written procedures, when available, for the analytical techniques or methods used; and,
7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

**H. Retention of Records.**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Data collected on site, copies of monitoring reports, and a copy of this MGWPCS permit must be maintained on site during the duration of activity at the permitted

location.

**I. Twenty-four Hour Notice of Noncompliance Reporting.**

The permittee shall report serious incidents of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:

1. Any noncompliance which may seriously endanger health or the environment;
2. Any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.G of this permit, "Bypass of Treatment Facilities".);
3. Any upset which exceeds any effluent limitation in the permit (See Part IV.H of this permit, "Upset Conditions".).
4. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
5. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, at (406) 444-3080.
6. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

**J. Other Noncompliance Reporting.**

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D of this permit are submitted. The reports shall contain the

the information listed in Part II.I.4 of this permit.

**K. Inspection and Entry.**

The permittee shall allow the head of the Department or the Director or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
4. Sample or monitor at reasonable times, for the purpose of assuring permits compliance, any substances or parameters at any location.

**III. COMPLIANCE RESPONSIBILITIES**

**A. Duty to Comply.**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department and the Director advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

**B. Penalties for Violations of Permit Conditions.**

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

**C. Need to Halt or Reduce Activity not a Defense.**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**D. Duty to Mitigate.**

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.

**E. Proper Operation and Maintenance.**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

**F. Removed Substances.**

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge shall not be directly blended with or enter either the final plant discharge and/or waters of the United States. Any sludges removed from the facility shall be disposed of in accordance with 40 CFR 503, 258 or other applicable rule. EPA and MDEQ shall be notified at least 180 days prior to such disposal taking place.

**G. Bypass of Treatment Facilities:**

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2 and III.G.3 of this permit.
2. Notice:
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".
3. Prohibition of Bypass.
- a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
    - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
    - (3) The permittee submitted notices as required under Part III.G.2 of this permit.
  - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

## **H. Upset Conditions**

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part IV.H.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required under Part II.I of this permit, "Twenty-four Hour Notice of Noncompliance Reporting"; and,
  - d. The permittee complied with any remedial measures required under Part IV.D of this permit, "Duty to Mitigate".
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### **IV. GENERAL REQUIREMENTS**

##### **A. Planned Changes**

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit; or,
2. There are any planned substantial changes to the existing sewage sludge management practices of storage and disposal. The permittee shall give the Department notice of any planned changes at least 180 days prior to their implementation.

##### **B. Anticipated Noncompliance**

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

##### **C. Permit Actions.**

This permit may be revoked, modified and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

##### **D. Duty to Reapply.**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of

this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

**E. Duty to Provide Information.**

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for revoking, modifying and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

**F. Other Information.**

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

**G. Signatory Requirements.**

All applications, reports or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department; and,
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**H. Penalties for Falsification of Reports.**

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

**I. Availability of Reports.**

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

**J. Oil and Hazardous Substance Liability.**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

**K. Property or Water Rights.**

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

**L. Severability.**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**M. Transfers.**

This permit may be transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
3. The Department does not notify the existing permittee and the proposed new permittee of intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and
4. Required annual and application and transfer fees have been paid.

**N. Fees.**

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-1-216(3), MCA, or
2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

**O. Reopener Provisions:**

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
2. Water Quality Standards are Exceeded: If it is found that water quality standards in the

receiving waters, excluding mixing zones as designated by ARM 17.30.501-17.30-518, are exceeded for parameters included in the permit, the department may modify the effluent limits or water management plan.

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.
4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.
5. Toxic Pollutants: A toxic standard or prohibition is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

**P. Biosolids:**

Sewage sludge (which is not landfilled in accordance with solid waste regulation at 40 CFR Part 258) must meet all applicable requirements for disposing of sludge through land application or surface disposal site at 40 CFR Part 503. The regulations are administered by the U.S. Environmental Protection Agency.

For land application, the regulations require demonstration of an approvable land application site; compliance with pollutant limits for metals and fecal coliform; treatment for pathogens; treatment for vector attraction reduction; agronomic application rates; site restriction on public access, animal grazing, and crop harvesting; monitoring; recordkeeping; and reporting.

For surface disposal, the regulations require an approvable surface disposal site; compliance with pollutant limits for metals; protection of groundwater from nitrate contamination; treatment for pathogens; treatment for vector attraction reduction; monitoring; recordkeeping; and reporting.

Implement other measures as determined by the Department, which may include invoking the permit condition set forth in Part IV. O., "Reopener Provisions".

**V. SPECIAL CONDITIONS**

**A. Corrective Action.**

An exceedance of an effluent limit in Outfall 003A, 004A, 005A , 006A for two reporting periods in any 24-month period shall require the installation of the minimum of two-groundwater monitoring wells, one upgradient the other downgradient of the standard 500-foot mixing zone.

The Department may also direct the permittee to implement one or more of the following contingency measures:

1. In coordination with the Department, review water quality trends, discharge data, and other site activities to identify the probable cause and extent of the water quality changes.
2. Install additional treatment prior to discharge into the IP cells to lower concentrations of the parameters detected.
3. Supply drinking water to residences located downgradient of the mixing zone.
4. Submit a written plan, within 5 days, that includes actions taken or planned, to reduce, eliminate, and prevent reoccurrence of the noncompliance.
5. Implement other measures as determined by the Department and may include invoking provisions set forth in Part IV. O.